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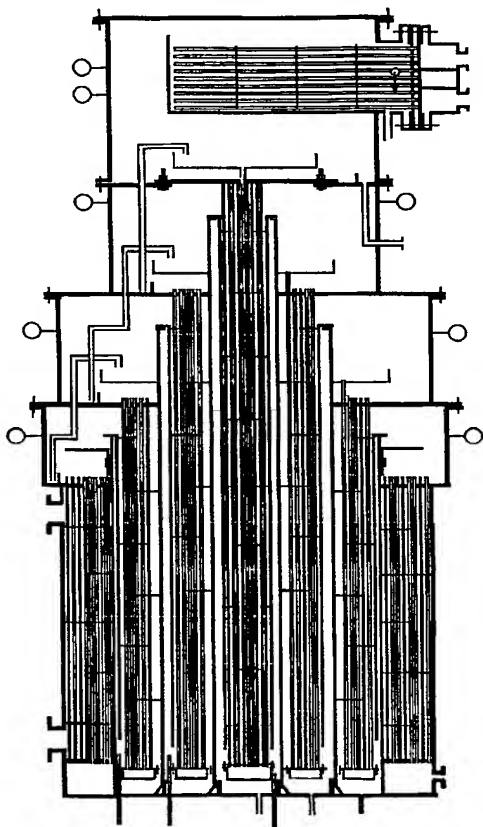
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(54) Title: DESALINATION MACHINE



(57) Abstract: A compact and economical array of vertical tube evapo-  
rators is disclosed in a multi-effect process, for desalination of sea water,  
brackish water, and in general to any water with dissolved solids, in order  
to produce fresh water for oil offshore platforms, ships, and for some arid  
locations, using rejected waste heat of thermal machines. This invention is  
based on a concentric disposition of the evaporators or stages, having three  
different specially designed evaporators, which the first stage is a shell and  
tube evaporator built in a ring format, named Ring Shell And Tube Evap-  
orator, including an internal shell, and having a vapour chamber above its  
upper tubesheet; the intermediate stage is a bundle of tubes in a ring format  
named Ring Bundle Evaporator, having a vapour chamber above its upper  
tubesheet; and the last stage that is a bundle of tubes in a circular arrange-  
ment named Cylindrical Bundle Evaporator.